How to behave? Visitor Guidelines for the Antarctic

Umwelt 😚 Bundesamt

For our environment

Imprint

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Preface

More and more people are interested in Antarctica, the last wilderness of our planet, with its unique fauna and flora. Until a few decades ago, the white continent was reserved for only a few discoverers, explorers and seafarers, but now it is a popular destination comfortable to reach. Since the beginning of Antarctic tourism, which focuses mainly on the Antarctic Peninsula, visitor numbers have increased considerably. By the mid-1990s, a total of around 8,000 travelers per season had visited Antarctica. In the meantime the number of visitors has increased almost tenfold and it tends to rise strongly. Due to its remoteness and extreme weather conditions, Antarctica also bears certain risks for visitors.





In order to maintain this continent in its original state in the future despite the growing number of visitors, internationally binding visitor guidelines to the Antarctic apply, which we present to you in this brochure.

Please observe these guidelines during your stay. They represent your personal contribution to the protection of the Antarctic and shall enable impressive experiences for yourself as well as for future generations.

Enjoy!

German Environment Agency

Map of the Antarctic



The Antarctic Treaty Area comprises the continent of Antarctica and the Southern Ocean surrounding it up to 60° south latitude.

Prominent Antarctic Species



Brown skua® FH



Giant petrel^{© FH}



Antarctic tern® FH



Gentoo penguin® FH



Adélie penguin^{© FH}



Chinstrap penguin® FH



Weddell seal^{© MM}



Elephant seal^{© FH}



Leopard seal^{© FH}



Antarctic fur seal^{© FH}

You will probably meet representatives of these species on your journey. Please make sure to always maintain the appropriate safety distance.

Keep your distance



It is vital to maintain enough safety distance to not disturb the animals.®FH

Antarctic wildlife is particularly susceptible to human disturbances. Once animals are startled, they suffer loss of heat and energy, which under the Antarctic climate and extreme living conditions can rapidly jeopardize survival chances. Young animals in particular are at great risk in this respect.

Once birds desert their nests, eggs and nestlings are unprotected against the cold and may become prey of hungry skuas. Therefore, it is crucial that you keep sufficient distance particularly to breeding penguins and other birds. Please keep in mind:

- Animals always have the right of way!
- Never block the escape route to the water or between a single animal and its colony!
- Keep your distance!
- Remain at the edge of colonies!
- Never circle or touch animals!
- Take pictures of the animals without flash!
- Always follow the instructions of the expedition leader!

The German Environment Agency recommends the following minimum distances

1	Seals and penguins	
	Breeding penguins	
	Sea birds, seals with pups, fur seals	
	15 m	
	Emperor penguins in colony	
	30 m	
	Giant petrels	50 m

In case animals change their behaviour upon approach, you need to retreat instantly. The following behavior indicates that you have approached too close to an animal:

- Seals lift their head,
- Skuas and Antarctic terns sound a warning cry and attack,
- Penguins and other birds leave their nest and interrupt their breeding.

Wildlife watching at sea

A memorable experience in the Antarctic is wildlife watching of marine animals, most notably whales, e.g. from a zodiac. With a bit of luck, whales will be just as curious as you are and approach your boat. Apart from a cautious operation of the boat, your personal conduct will be crucial for whether marine animals feel harassed.

The following guidelines shall ensure memorable and safe wildlife watching at sea:



If visitors behave carefully, whales sometimes come very close to the boats. ${}^{^{\odot}\rm FH}$

- Avoid loud noise, whistling etc.!
- Avoid rapid movements when a whale is approaching the boat or the coastline!
- Never touch or feed the animals!
- Whales can surface unexpectedly. Be prepared and stay calm!
- Always follow the instructions of the zodiac operator!

Listen to the silence

More than anything else, Antarctica is a continent of tranquility and forces of nature. Narrow, ice-free coastlines provide habitats for wildlife and vegetation, while the interior of Antarctica is mostly inanimate.

To ensure that you and your fellow travellers can enjoy the beauty and tranquility of Antarctica, please refrain from causing unnecessary noise and shouting. Such disturbances may cause escape-flight responses of sea birds and penguins, may lead to behavioural changes or even to dislocation of entire colonies.

Therefore, please:

- Avoid unnecessary noise and shouting!
- Do not use electronic entertainment equipment!

Do not leave footprints ...

Because of the extreme climatic conditions and the short vegetation period in the Antarctic, plants and animals are very vulnerable to external influence. Slow vegetation growth rates – lichens may grow only by 1–2 cm in the course of a century – leads to footprints remaining visible for long periods. Make sure that grass, moss or lichens are not damaged by your footsteps. Therefore do not leave your group and – if possible – stay on existing paths.

The nests of ground breeders, such as the Antarctic tern, are very well camouflaged. Thus, be particularly careful in pathless terrain. Especially when taking pictures, many visitors forget how sensitive the Antarctic environment is. Therefore, please avoid damage and disturbance to plants and wildlife when searching for a good motif.



Footprints remain visible on the very slowly growing vegetation for many years.^{© OM}

Kindly respect these guidelines:

- Take nothing with you and leave nothing behind!
- Remain on existing trails!
- Avoid stepping on vegetation!
- Look out for ground breeders!
- Make sure that you keep belongings, equipment and waste safe and that they do not end up in the environment!
- Do not smoke!

... take only memories

Some areas of the Antarctic are visited annually by more than 20,000 tourists. To preserve the unique wilderness and integrity regardless, it is important that in Antarctica everything stays the way it is. Please leave stones, soil, fossils, bones, feathers, eggs and flotsam. Neither tear out plants nor take any animals with you! Your experiences and photos are the best memories of Antarctica.



At some landing sites, whale skeletons still bear witness to the turbulent past of Antarctica.^{© HH}

Do not introduce uninvited guests

Due to its exceptional climate and remoteness from the next continent, Antarctica was protected from external influences for a long time. This has changed with the beginning of increased human activity in the Antarctic. The immigration and distribution of non-native species and pathogens threatens Antarctic biocoenoses: they may either compete for food and habitats or may trigger unknown diseases. Antarctic flora and fauna are at risk from bacteria and viruses as well as from accidentally introduced microorganisms, plant seeds and spores.

Continuing climate change intensifies the pressure on Antarctic flora and fauna additionally. The spectrum of species is already shifting in some areas in favour of thermophile animals and plants and to the disadvantage of "cold experts" (species adapted to cold habitats). This is the reason why new species, originally from warmer regions, are able to survive in Antarctica by now.

Please note the following recommendations:

- Carefully clean your shoes, Velcro, hiking poles and tripod before entering Antarctica for the first time and after every onshore visit!
- Do not introduce seeds, plants or animals into Antarctica!





By thoroughly cleaning your shoes, you avoid introducing and spreading non-native species into and within the Antarctic. $^{\odot\,\rm FH}$

Respect scientific research

For more than a century, research has been conducted in the Antarctic in fields such as astrophysics, biology, geology, glaciology, climatology, medicine, meteorology and oceanography. Globally unique conditions of the Antarctic environment are incentive for numerous countries to carry out research in the Antarctic under considerable logistic efforts:

- Inland ice and glaciers of Antarctica are unique "archives" of historic climate conditions and can provide the key to understanding today's climate changes.
- The comparatively simple food chains of Antarctic ecosystems are particularly well-suited for the study of biological relationships and interactions.
- Antarctica has the best air quality in the world. Reliable air measurements without direct human influence can be carried out here.

Therefore, please keep in mind not to disturb scientific research during your stay.

We kindly ask you:

- Do not enter marked-off research sites and field camps!
- Do not touch or remove scientific equipment or markings!
- Respect the privacy of research personnel!



There are many research stations in the Antarctic Peninsula. Pay attention to topographic markings and technical equipment in their vicinity. $^{\odot\,\rm FH}$

Respect protected areas

Antarctic Specially Protected Areas (ASPAs) serve, inter alia, to protect animals and plants from disturbance and to preserve particularly pristine areas in their original condition. Generally, ASPAs may only be entered with a special permit.

In addition to these protected areas, the Antarctic Treaty Parties have also established some special Antarctic administrative areas, the Antarctic Specially Managed Areas (ASMAs), at heavily frequented sites. In these ASMAs, binding, individual regulations apply for the planning and coordination of tourist and non-tourist activities, which are laid down in a management plan. In this way, it is to be ensured that, despite high visitor numbers and the arising pressure, the impacts on the local ecosystems are minimized as far as possible.

In summary this means:

- Do not enter ASPAs!
- Comply with the provisions applicable in ASMAs!
- Always follow the instructions of the expedition leader!

Preserve historic sites

Due to its comparatively short history of discovery, Antarctica is featuring remarkably authentic testimonies of its exploration, research and industrial history. To preserve these landmarks for future generations, they are protected as Historic Sites and Monuments (HSMs). Help to preserve their original condition.



Time seems to have stopped in historical buildings. Visitors can get an idea of the living conditions of researchers and discoverers from the last century. $^{\odot\,\rm FH}$



On "Deception Island", designated as ASMA, remains of old research and whaling stations still are to be found. $^{\odot\,\rm HH}$

However, some structures and huts are already weatherbeaten and harbour undetectable security risks. Only enter huts that are open to the public. Act responsibly and help to ensure that these sites remain accessible in the future.

Thus, we kindly ask you:

- Do not modify historical sites and monuments!
- Be careful in historical buildings and do not touch any objects!
- Do not remove any objects from the huts or from their surroundings!
- Observe individually applicable rules and safety instructions!

Stay safe

Your personal safety has priority at all times. Regardless of whether you are alone or in a group, you should, by no means, disregard your own safety. In the Antarctic, weather conditions can rapidly change: dead calm can change into hurricane force winds of more than 130 km/h. Catabatic winds can speed up to more than 300 km/h. Fog, gale-force winds and the similarity of areas can impede orientation and thus the return to the landing site.



Please note that the weather in Antarctica can change at any time.^{© FH}

In snow-covered landscapes and under corresponding weather conditions, the so-called "white-out effect" can also occur making the horizon no longer discernable. This can lead to disorientation, impair the sense of equilibrium and trigger an oppressive feeling.

Even for well-trained, healthy people, the adverse climatic conditions in Antarctica additionally strain the body. Due to the wind ("wind chill" effect), the already low temperatures have an aggravating effect.



Unknown terrain always entails safety risks. Glaciers with deep crevasses can hide under snow fields. Therefore, act cautiously, don't overestimate your abilities and always stay close to your group. In this way you avoid dangerous rescue operations, which usually entail detriment to the Antarctic environment.

Existing refuge huts are only to be used in emergencies. If you use equipment or food, inform your tour guide or nearest station immediately.

Be sure to keep a sufficient distance to animals. Especially fur seals and skuas can react aggressively to your approach and cause serious injuries. Approach carefully and retreat in good time upon any sign of aggressive behaviour.

For your own sake, please do not forget the following recommendations:

- Stay with your group!
- Pay attention to your physical limits and those of the weakest group member!
- Expect weather upheavals and orientation difficulties!
- Keep a safe distance to animals!
- Be alerted to crevasses on glaciers and snowfields!

A Natural space for peace and science – the international treaty system of the Antarctic

The Antarctic Treaty

Through the Antarctic Treaty of 1959, the Antarctic was declared as a continent of peace, international co-operation and scientific research. For the first time, this international treaty bindingly regulates human activities for an entire continent. Germany joined the Antarctic Treaty in 1979 and is thus bound by the treaty and the decisions taken at the annual meetings of its Parties. More than 50 states have signed the Antarctic Treaty to date. A large part of these states, including Germany, have the status of a Consultative Party due to extensive research activities allowing them to participate in the elaboration of international regulations for the Antarctic.

The Environmental Protocol

Through the Protocol on Environmental Protection (EP) to the Antarctic Treaty, the Parties to the Treaty agreed to comprehensively protect the Antarctic environment and its intrinsic and wilderness value. The EP prohibits any commercial exploitation of Antarctic natural resources and regulates the environmental impact assessment of all planned activities in Antarctica. Germany has transposed the EP into national law by the Act implementing the

Protocol of Environmental Protection to the Antarctic Treaty (Ausführungsgesetz zum Umweltschutzprotokoll zum Antarktis-Vertrag, AUG).

Additional regulation of tourism

As early as 1994, the Parties to the Antarctic Treaty adopted binding provisions for the protection of flora and fauna both for tourism operators and for you as visitor to the Antarctic. In 2011, these resulted in a general visitor guideline that applies to all Antarctic landing sites. Since 2007, it has been mandatory that only a maximum of 100 passengers may stay onshore at the same time and that ships carrying more than 500 passengers may not make any landings. Additionally, there are site-specific regulations ("Site Guidelines") for popular and therefore highly frequented landing sites. Some of these regulations are based on the applicable environmental and safety guidelines of the International Association of Antarctica Tour Operators (IAATO). Special guidelines for vachts have been in force since 2012. All these documents are publicly accessible and can be found on the Internet, e.g. on the website of the German Environment Agency. On board of your cruise ship, you receive these documents upon request.

The role of the German Environment Agency

The AUG designates the German Environment Agency (Umweltbundesamt, UBA) as national competent authority responsible for authorising all activities in the Antarctic that either are organised in Germany or proceed from its territory. Consequently, German tour operators are obliged to obtain permission for planned expeditions in the Antarctic from the UBA. Furthermore, tour operators are required to inform their guests on board about environmentally sound behavior and ensure compliance with these guidelines. As the UBA is also obliged to verify compliance with the AUG and the permit issued, tour operators are to hand in a post-visit report describing the actual course of the itinerary.



